View metadata, citation and similar papers at core.ac.uk
brought to you by CORE
provided by Elsevier - Publisher Connector

ences in survival could be identified apart from the general finding that survivorship decreased as the number of positive stations increased.

In order to reconcile the Naruke and MD-ATS lymph node maps and permit analyses of cases with N1 and especially N2 disease to include larger number of patients, lymph node stations were grouped together into anatomical "zones". Lymph nodes at levels 1-4 were grouped together into the "upper zone", levels 5 and 6 into the "AP zone", level 7 into the "subcarinal zone", levels 8 and 9 into the "lower zone", levels 10 and 11 into the "hilar zone", and levels 12-14 into the "peripheral zone". The appropriateness of grouping lymph node stations into "zones" was suggested by exploratory analyses that failed to identify significant differences in survival in relationship to disease in all of the various N1 and N2 lymph node stations in data submitted from Japan, or from non-Japanese groups, or both. Significant differences in survival for patients with lymph node metastases confined to a single zone were only seen for cases of right-sided tumors with upper or subcarinal zone disease compared to peripheral zone metastases. No differences in survival were identified among patients who had single zone N2 disease. AP zone disease in the absence of N1 metastases was associated with a better survival in patients with left upper tumors, but similar differences in survival were not identified for right upper lobe tumors with right paratracheal nodal metastases.

The potential impact of the number of involved lymph node zones on survival was then examined. Three groups were found to have significantly different survivals: patients who had N1 single zone disease, those who had either multiple N1 or single N2 zone metastases and those who had multiple N2 lymph node zones involved. These prognostically distinct groups suggested that it might be appropriate to subdivide the current N staging descriptors into N1a (single N1 zone), N1b (multiple N1 zones), N2a (single N2 zones), and N2b (multiple N2 zones). In order to determine whether such a revision to the staging system should be considered, these additional N categories were analyzed in conjunction with each T stage category (e.g. T1N1a, T1N1b, T1N2a, T1N2b, etc.) rather than across all T stages as was done for all of the preceding analyses. However, the number of patients available in each of these subsets was too small to yield statistically valid analyses. Therefore, on the basis of the available data, we cannot recommend altering the current N stage descriptors.

In summary, analyses of clinical and pathological N staging in the IASLC database support the continued use of the current N descriptors in the lung cancer database. Additional analyses suggest that consolidation of multiple lymph node stations into "zones" and stratification of patients into 3 groups according to the extent of nodal disease may be appropriate and warrant inclusion in future studies.

References

1. Martini N. Mediastinal lymph node dissection for lung cancer. The Memorial experience. Chest Surg Clin N Amer 1995;5:189-203.
2. The Japan lung Cancer Society. Classification of Lung Cancer. First English Edition. Tokyo: Kanehara & Co, 2000.
3. Mountain CF, Dresler CM. Regional lymph node classification for lung cancer staging. Chest 1997;111:1718-1723.

E05-04 **IASLC Staging Project, Mon, Sept 3, 16:00 – 17:30**

M-descriptors

Postmus, Pieter E.

Department of Pulmonary Diseases, VU University Medical Center, Amsterdam, The Netherlands

Purpose: To analyse all non-lymphatic metastatic components (T4 and M1) of the current TNM system of lung cancer with the objective of providing suggestions for the next edition of the TNM classification for lung cancer.

Material and Methods: Data on 100,809 patients were submitted to the International Association for the Study of Lung Cancer International Database. 5,592 selected T4M0 and M1 patients fulfilled the inclusion criteria for the analysis. Specific categories of clinically staged T4 (lesions not continuous with the primary tumor) and M1 cases were compared with respect to overall survival using Kaplan-Meier survival estimates and comparisons via Cox regression analysis. Relevant findings were internally validated by geographic area and type of database, and externally validated by the North-American Surveillance, Epidemiology and End Results Registries.

Results: Median survival for cT4M0 with malignant pleural effusion was significantly worse than that of other cT4M0 patients (8 months vs. 13 months) and was more comparable to M1 cases with metastases to the lung only (10 months). M1 cases with metastases outside the lung/pleura had a significantly poorer prognosis than those with metastases confined to the lung, with a median survival of 6 months.

Conclusions: Revisions to the TNM classification system for lung cancer should include grouping cases with malignant pleural effusions and cases with nodules in the contralateral lung in the M1a category, and cases with distant metastases should be designated M1b. In addition, cases with nodule(s) in the ipsilateral lung (non-primary lobe), currently staged M1, should be reclassified as T4M0, in accordance with the recommendations of T descriptor sub-committee of the IASLC International Staging committee.

E05-05 **IASLC Staging Project, Mon, Sept 3, 16:00 – 17:30**

IASLC staging project: prognostic factors

Sculier, Jean-paul

Institut Jules Bordet (ULB), Brussels, Belgium

Potential a priori useful prognostic variables for survival of patients presenting with lung cancer, as determined according to the series analyses reported in the literature, include in addition to the TNM stage:

- Tumour characteristics : localization of metastatic sites : brain, liver, adrenals, bone, lung; number of metastatic sites; pleural effusion; type of lesions (assessable, measurable); tumour size and volume; histology : non-small cell lung cancer (NSCLC) or small cell lung cancer (SCLC); squamous cell carcinoma versus adenocarcinoma versus large cell carcinoma ...; neuroendocrine tumours; tumour differentiation and grade ; lymphatic and blood vessel invasion; symptoms; fluorodeoxyglucose positron emission tomography (FDG-PET) scan
- Patients characteristics : age; sex; performance status (PS); weight loss; smoking history; race; comorbidities (Charslon's index, Colinet's simplified comorbidity score)
- Laboratory parameters : serum bilirubin; serum calcium ; serum sodium ; serum creatinine; haemoglobinemia; leucocytosis; neutro-

Copyright © 2007 by the International Association for the Study of Lung Cancer